

COVID-19 Monthly Epidemiological Report April 2021

Unless otherwise indicated, data for analyses in this report were extracted from Texas Health Trace on **05/10/2021** and include cases with event dates through 04/30/2021. Results are subject to change.

Key Takeaways

Continued Decrease in New Cases

- The number of new COVID-19 cases rose slightly during April, with the addition of 6,688 new cases with event date* during April. This is 3% of all cases to date. Young adults ages 20-29 contributed 23% of the April total.
- 219,123 individuals are known to have had COVID-19 to date in Bexar county.

Hospitalizations and Deaths

- New COVID-19 hospital admissions stabilized in April, slightly increasing the week of 4/19/2021
- Average ICU percentage hovered around 36% for April, slightly lower the 39% seen in March.
- 57 deaths from COVID-19 occurred during April, bringing the total to 3,397. Case fatality rate remains 1.6% overall, 1.9% for males and 1.3% for females. The greatest risk of death is among the most elderly: 20% among those 80+ years of age.

Other Trends

- Throughout April, COVID-19 test positivity has remained below the target benchmark of 5%.
- Cases occurring in congregate settings have stayed steady over the past three months: 27 cases occurred during April.
- * Event date is the date of symptom onset or first positive COVID-19 test, whichever is known to occur first.

I. Current Status and Overview of COVID-19 in Bexar County

Summary: During the five calendar weeks of April, Bexar County reported 6,953 new cases (plus a 5,363 case backlog), as well as 1,017 new COVID-19 associated hospitalizations, and 44 deaths. Overall, April continued the declines observed in March.

Weekly newly reported cases were 11% higher than in March, but still 61% fewer than during February. (Reported cases may have occurred anytime during the previous 14 days.)

Weekly new hospital admissions increased initially, but overall April saw 10% fewer new hospitalizations than in March, and 54% fewer than during February.

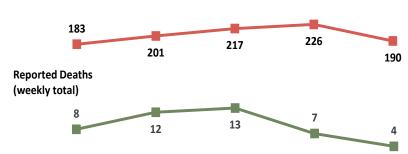
Weekly reported deaths increased during the first two weeks but by the last week of April had declined to four deaths. Overall, this was 29% fewer deaths occurred in March, and 68% fewer than in February. (Reported deaths may have occurred anytime during the previous 14 days.)

Weekly test positivity remained well below the 5% benchmark, averaging 2.3% for the month.

Weekly Trends through April (Mon-Sun)



New COVID-19 Positive STRAC Hospitalizations (weekly total)



Test Positivity Rate (weekly average)

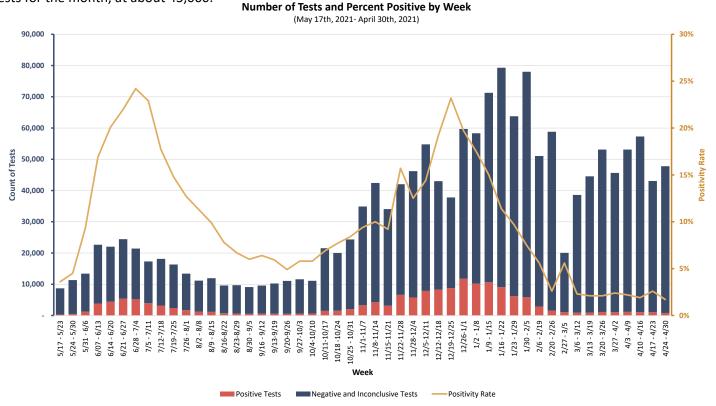


All data reflect dates they were reported.
*Delayed reports of backlogged cases and deaths are not included in weekly totals.

05/20/2021

II. Testing & Positivity Rate

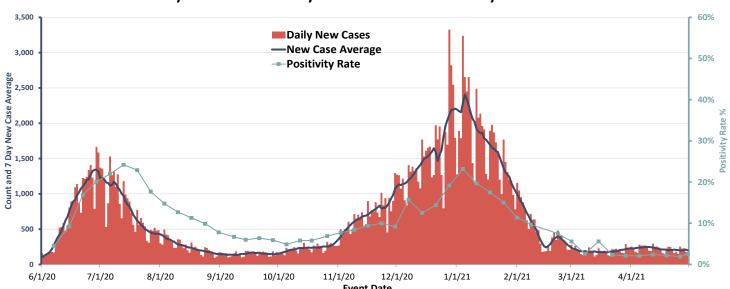
Bexar county's COVID-19 weekly positivity rate remained steady at around 2.5% during April, with a low of 1.9% in the third week. About 200,000 tests were processed over the month. The week of April 24th-30th had the lowest number of tests for the month, at about 43,000.



III. Trends & Demographic Characteristics among COVID-19 Cases

April demonstrated a **relatively stable case trend** compared to the summer and winter surges. It also marks the longest interval during the pandemic where there has not been a documented surge in Bexar county since the summer 2020 surge. Preliminary data indicate this trend may continue into early May.

Bexar County COVID-19 Cases by Event Date* and Positivity Rate

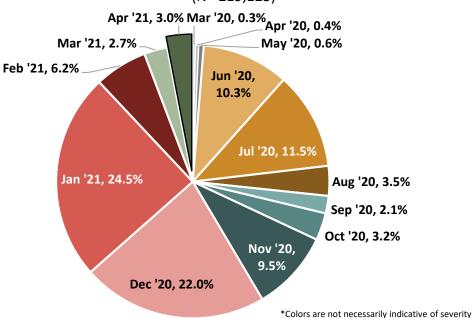


Average shown is a centered moving average calculated as t0 +/- 3 days

*Event date refers to either illness onset date (for symptomatic cases) or test collection date (for asymptomatic cases or when onset date not available). This differs from Reported Date.

Percentage of Total COVID-19 Cases in Bexar County by Event Month*

(N= 219,123)

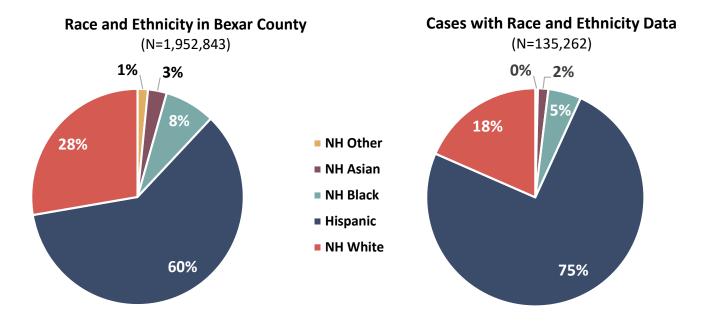


Data for April indicate a relatively stable plateau in new cases: **3% of all COVID-19 cases to date occurred during the month of April, up 10%** from March but generally continuing the decline starting in February 2021.

Note: The numbers provided in this chart are based on event date – the date of first symptoms or test collection date if the person was asymptomatic or date of first symptoms is not available.

III. A. Race/Ethnicity Distribution of Cases

Among cases for whom race/ethnicity data are available (61.7%), **Hispanic individuals make up a larger proportion of cases** than they do of the general population of Bexar County. This pattern is observed across every age-group, and may suggest that the pandemic has disproportionately affected Hispanic individuals.



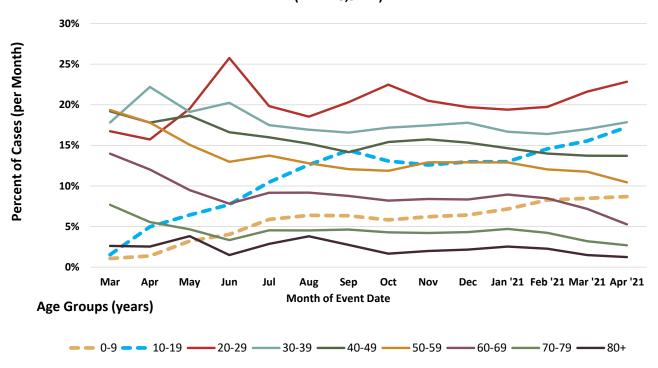
Notes:

- 1. Due to limitations inherent in our database, data collection procedures, and/or our sources, data on race and/or ethnicity are currently unavailable for about 38% of cases. For this reason, meaningfully accurate determination of racial and ethnic disparities in COVID-19 diagnoses is currently not possible.
- 2. The number of Bexar County residents above is the ACS (5-yr) 2019 population estimate.
- 3. NH = Non-Hispanic

05/20/2021

III. B. Age and Gender

Distribution of Cases by Age Group, over Time (N = 218,974*)



The proportional contributions by age group have generally remained consistent over the pandemic: group 20-29 years (**red line**) has generally comprised the greatest percent of new cases (23% in April), 30 -39 the next largest group, and so on through each subsequent 10-year group, with age 80+ years (**black line**) comprising the smallest percent.

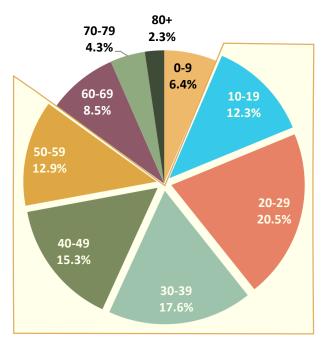
However, over time the proportion of new cases among persons 10-19 years of age (turquoise dashes) has almost tripled, from about 5% during spring 2020 to a level similar to adults ages 50-59 (solid beige line), roughly 13%-14%. By April 2021 age group 10-19 accounted for 18% of the monthly total, close to age group 30-39 (sage line). Most of this change is attributable to older teenagers.

Cases among young children (ages 0-9; dashed beige line) followed a similar but less pronounced trend, increasing from 3% in late spring 2020 to 6% during late summer, and 9% in April 2021. The proportion of new cases in age group 20-29 years has also increased slightly over the pandemic. These increases have been accompanied by gradual declines in case proportions among all other adult age groups, the least extent among ages 80+.

Overall, cases 10 to 59 years of age account for 78% of all cases. The average age at COVID-19 occurrence is now 38 years, median 35 years.

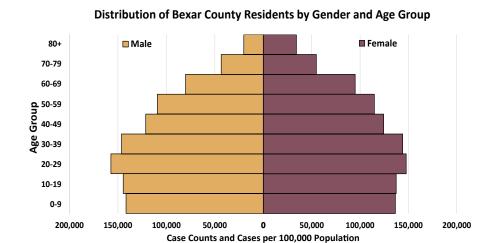
Cases by Age Group (%)

(N=219,980*)

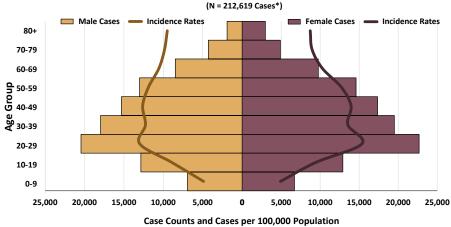


^{*}Excludes 149 cases (0.1%) of unknown age.

IV. The Extent of COVID-19 in the Bexar County Population



Distribution of COVID-19 Cases by Gender and Age Group, with Respective Case Rates per 100,000*



*Excludes 6,510 cases (3.0%) for whom age and/or gender was not available at time of this analysis.

This more traditional representation of age-specific rates[†] clearly demonstrates how the pandemic has focused on younger adults, and particularly women. This pattern was established in June 2020, and has persisted since then.

Through the end of April 111,423 females and 101,196 males are known to have had COVID-19.

Age-adjusted case rates‡ adjust for different population age structures (as shown in upper pyramid) and allow comparisons between groups. To date, COVID-19 age-adjusted case rates are 11,261 per 100,000 females and 10,486 per 100,000 males. The female rate is 7% higher than the male rate. The overall age-adjusted case rate for the County is now 11,181 per 100,000 population.

The upper pyramid shows the distribution of Bexar County residents by age and gender.

The case pyramid (middle graph) shows the age distribution of all COVID-19 cases to date. The greatest numbers of cases has occurred among age group 20-29 years, and the smallest numbers among older adults, age groups 70-79 and 80+ years. This general pattern has persisted throughout the pandemic.

Age-specific case rates† (curved lines in middle graph) show the number of cases per 100,000 persons of the same gender and age group, and present a more nuanced picture. The lowest case rates have occurred among young children (ages 0-9 years): about 4,900 cases per 100,000 in each gender, or 4.9%.

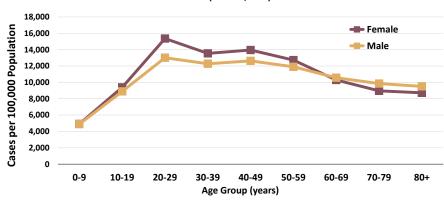
Young adults ages 20-29 have had the highest case rates, about 15,400 cases per 100,000 females (15.4%) and 13,300 cases per 100,000 males (13.3%). This is also the age group with the greatest gender imbalance: the female case rate is 18% greater than the male rate.

Overall, 11.2% (1 in 9) Bexar County residents is known to have had COVID-19. This includes 11.3 % of females, and 10.5% of males.

†Age-specific rates use the ACS (5-yr) 2019 population estimates for Bexar County.

Age-Specific COVID-19 Case Rates, by Gender (per 100,000 population)

(per 100,000 population) (N = 212,619*)



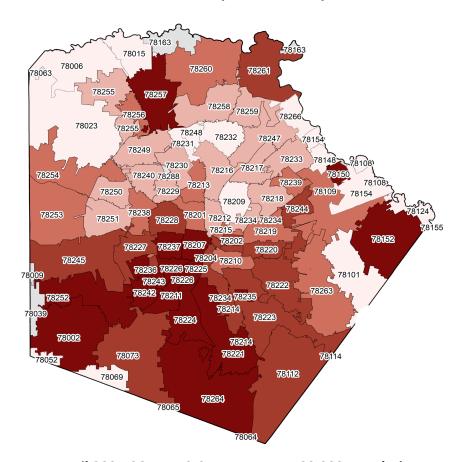
^{*}Excludes 6,510 cases (3.0%) for whom age and/or gender was not available at time of this analysis.

 $^{^\}dagger$ Age-specific rates use the ACS (5-yr) 2019 population estimates for Bexar County.

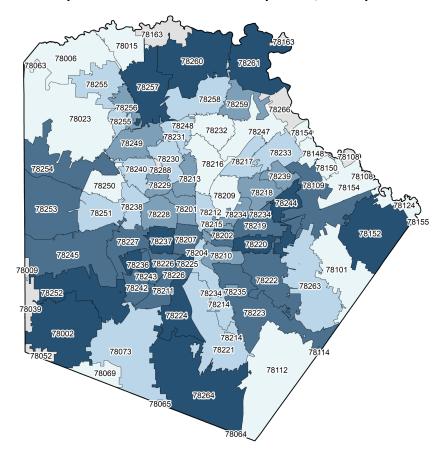
[‡]Age-adjusted rates are weighted using the US Standard Population 2000.

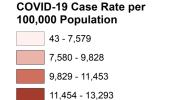


COVID-19 Case Rate per 100,000 Population



April 2021 COVID-19 Case Rate per 100,000 Population





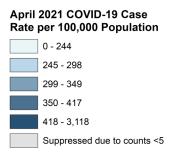
13,294 - 48,724

Suppressed due to counts <5

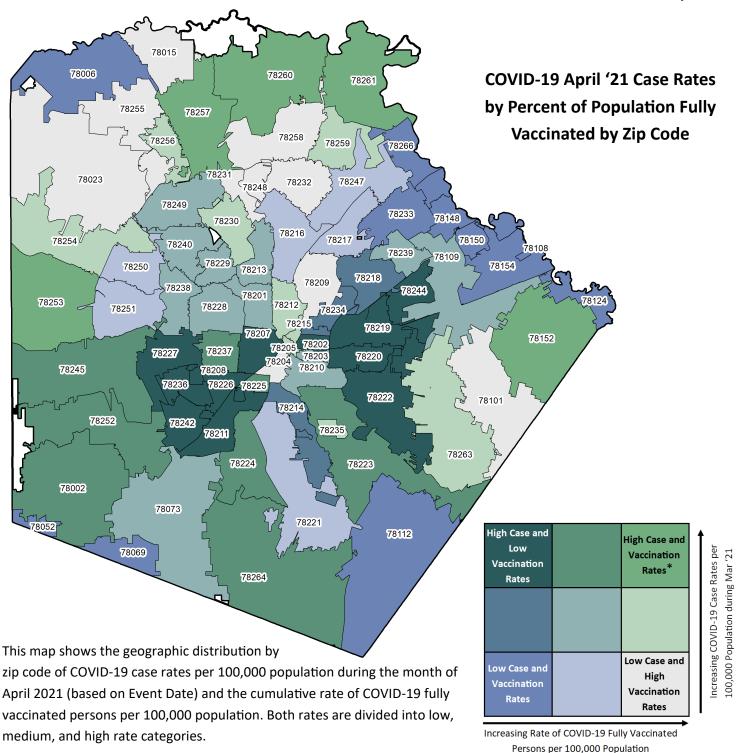
The geographic distribution of total COVID-19 case rates by zip code continues to show the highest rates of infection have generally been in the southern portion of Bexar County.

Some exceptions include 78257, 78150, and 78152, in the north and eastern parts of Bexar County, which also have some of the highest case rates.

For the month of April 2021, the highest rates of new COVID-19 infections occurred to the southwestern, eastern, and far northern portions of Bexar County.



Data Source: SAMHD COVID-19 case data through 05/10/2021, event dates through 04/30/2021; U.S. Census, ACS 2019 5-year Population Estimates, Table S0101.



Zip codes shaded dark green indicate they are in the highest third of new

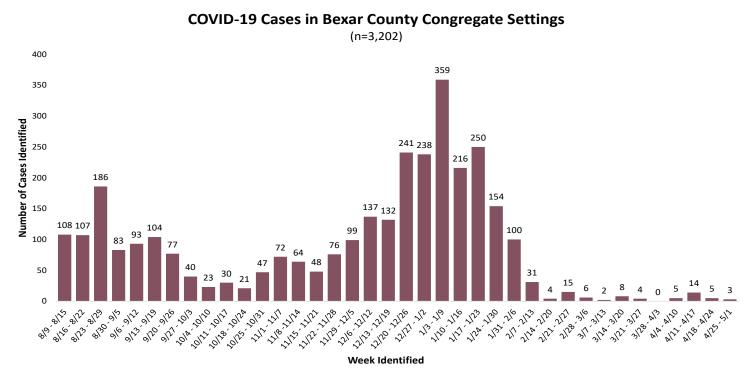
COVID-19 case rates, as well as are in the lowest third of rates of fully vaccinated persons. Conversely, those zip codes shaded solid grey indicate they are in the lowest third of new COVID-19 case rates for the month and are in the highest third for rates of fully vaccinated persons. In general, zip codes near to the southwest of downtown have higher COVID-19 case rates and lower vaccination rates. Conversely, zip codes in the northern portion of Bexar County have lower COVID-19 case rates and higher vaccination rates.

^{*}Since this is historical data, areas in green with high case and vaccination rates do not necessarily indicate that the cases occur after vaccination. Data Source: SAMHD COVID-19 Database, as of 05/10/2021; U.S. Census Bureau, ACS 2019 5-Year Estimates, Table S1701

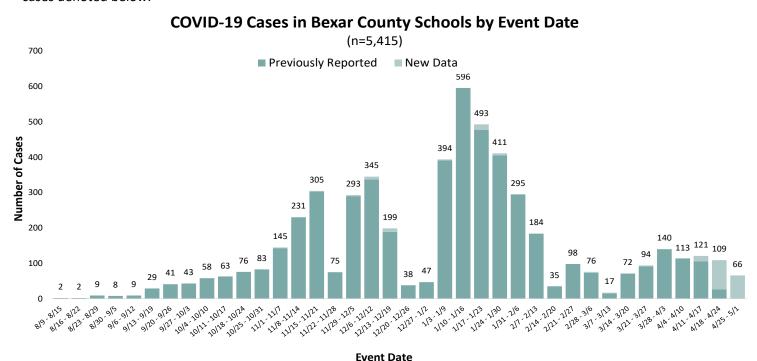


V. Congregate Setting & School-Related Cases

The number of cases occurring in **congregate settings have stayed steady over the past three months: 27 cases occurred during April**. Total deaths associated with congregate settings are now 563. All-time case fatality in congregate settings is 17.6%.



The number of cases among children who are infectious while physically at school **increased in April** when compared to March. It is important to note that the majority of these cases were NOT caused by in-school exposure. The 16 outbreaks to date in Bexar County schools with known in-school transmission have contributed only 130 (2.4%) of the 5,415 cases denoted below.

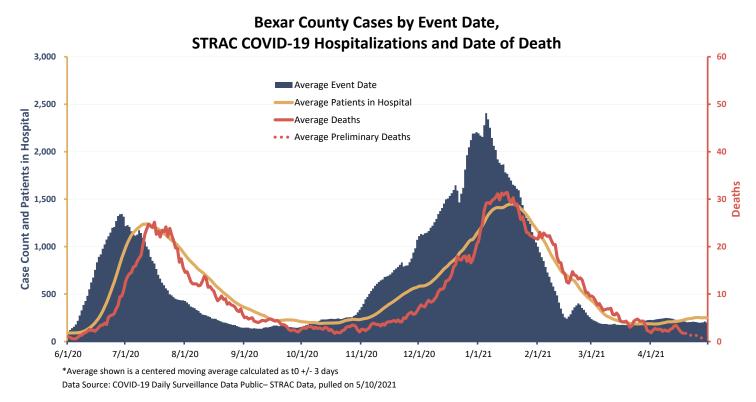


Note: The lighter teal indicates new data not previously reported in the weekly congregate settings report.

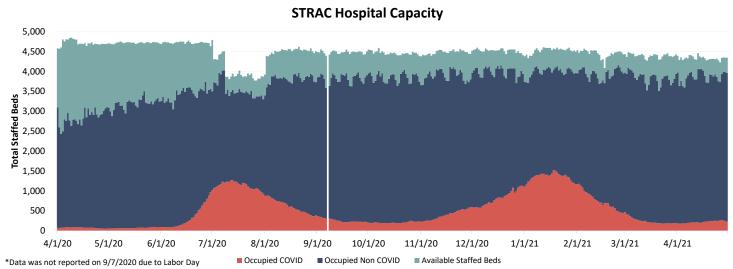
VI. Hospitalizations and Deaths among COVID-19 Cases

VI. A. Hospitalizations

Cases, hospitalizations, and deaths all remained relatively stable through April compared to recent months of the pandemic. A slight increase in average cases was seen around 4/9/2021, with average hospitalizations following about two weeks later. **Deaths saw a slight increase around 4/14/2021.**



In April, COVID+ occupancy (coral) declined to an average of 219 beds per day, an 11% decrease from March. Available (unoccupied) staffed beds (teal) make up about a 11% of total staffed beds. COVID+ accounted for only 5% of staffed beds, while Non-COVID+ occupancy (navy) slightly increased from March to an average of 3,651 beds per day in April.



Data Source: COVID-19 Daily Surveillance Data Public – STRAC Data, pulled on 5/10/2021

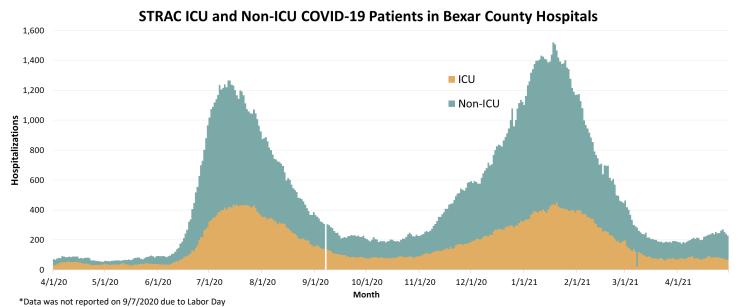
05/20/2021

^{*}General and specialty hospitals in Bexar county designated by the Southwest Texas Regional Advisory Council as part of the local trauma/emergency healthcare system. Includes hospitals in the Baptist, Christus, Methodist, SW General, University, BAMC and VAMC systems treating COVID+ patients.



As noted in a previous graphic, hospitalizations remained relatively stable, albeit with an increase towards the middle to end of April. Average ICU percentage hovered around 36% for April, slightly lower than the 39% seen in March. Data continues to show a trend of average ICU percentage dropping as hospitalizations increase.

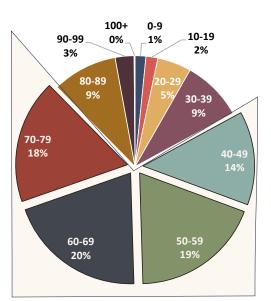
Note: Patients typically stay several days in the hospital, especially in the ICU.



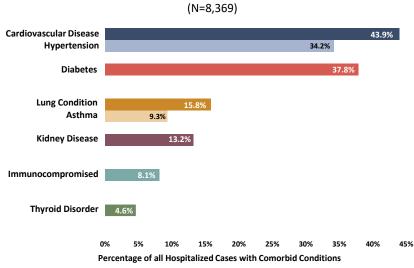
Data Source: COVID-19 Daily Surveillance Data Public – STRAC Data, pulled on 5/10/2021

Hospitalized Cases by 10-Year Age Groups (%)





Comorbidities Among Hospitalized Cases



To date, **8,369** individuals have been hospitalized due to COVID-19. Hospitalization trends by age have remained consistent with previous reports. Cases with **ages 40-79** account for the majority of hospitalizations (71%).

Of all hospitalizations due to COVID-19, 71% were reported to have comorbid conditions. Cardiovascular disease (43.9%) is the most prevalent comorbidity among hospitalized COVID-19 cases, followed by diabetes (37.8%).

Note: For the purposes of this report, hypertension is included in the category "cardiovascular disease", and also shown separately to highlight conditions of special interest. Similarly, asthma is included in "lung condition", and shown separately.

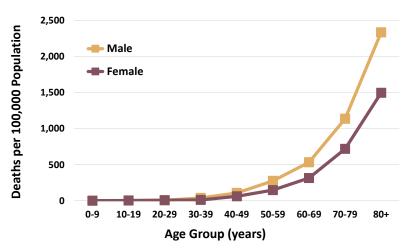
April 2021 VI. B. Deaths

During April, 17 deaths occurred due to COVID-19, bringing the total to 3,397. The case fatality rate continues at 1.6 deaths per 100 cases (1.9 for males, and 1.3 for females). The age-adjusted mortality rate† is 186 deaths per 100,000 population.

Males continue to account for more than half of all deaths (56%; N=1,887). Age-specific mortality curves show that this gender disparity is evident in age groups 30-39 years and older, a pattern that has persisted throughout the pandemic.

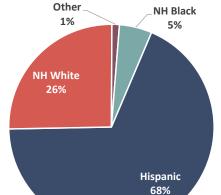
†Age-adjusted rates use the ACS 5-yr 2019 gender-specific population estimates for Bexar County and the US Standard Population 2000 weights. ‡Age-specific rates use ACS 5-yrs. 2019 gender-specific population estimates for Bexar County.

Age-Specific Mortality Rates, by Gender (per 100,000 population; N = 3,368*)



^{*} Excludes 29 deceased cases (0.2%) for whom gender and/or age are unavailable.

Deceased Cases by Race/Ethncity (N=3,042*)

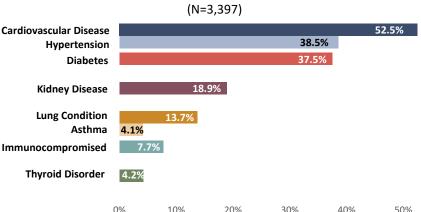


NH = Non-Hispanic

Hispanics appear to have a disproportionate burden of death due to COVID-19. Of the 90%* of deaths for whom race/ethnicity data are available, Hispanic individuals account for 68% of deceased cases, compared to 60% of the Bexar County population being Hispanic[†].

Age-adjusted mortality rates[†] are 228 for Hispanics and 104 for Non-Hispanics. This disparity is consistent with the higher percent of cases of known race/ethnicity who are Hispanic, compared to the general Bexar County population. However, because race/ethnicity data are unavailable for 38% of COVID-19 cases, it is not possible to calculate the risk of death among cases by race/ethnicity.

Deceased Cases with Comorbid Conditions



Percentage of All Deceased Cases with Comorbid Conditions

Of all deceased cases, approximately 71% were reported to have comorbid conditions.

Approximately half of deceased cases were reported as having cardiovascular disease (52.5%), 37.5% had diabetes, and 18.9% had kidney disease.

Note: For the purposes of this report, hypertension is included in the category "cardiovascular disease", and also

^{*}Race and ethnicity data are not available for 355 (10.5%) of deceased cases.

[†]ACS 5-yr 2019 population estimates for Bexar County.

[‡]Age-adjusted rates use the ACS 5-yr 2019 ethnicity-specific population estimates for Bexar County, and the US Standard Population 2000 weights.



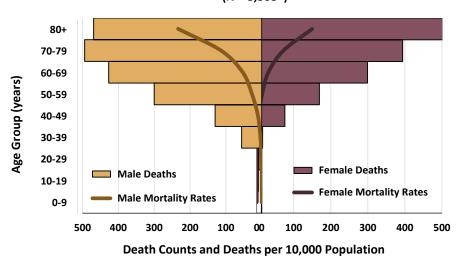
The pyramid graph of deaths with superimposed agespecific mortality rates† again highlights the higher burdens of mortality among males: more deaths occur among males than females, even though more females have been diagnosed with COVID-19. This is reflected in the higher male case fatality risk: 1.9 deaths per 100 cases compared with 1.3 for females.

Older persons are also at increased risk of death due this disease, a pattern that has persisted throughout the pandemic. 56% of all deaths have occurred among cases 70 years of age. Among cases 80 years of age or older, the risk of death is 24% for males, and 17% for females.

The average age at COVID-19 onset for deceased cases is 69 years for males, and 73 years for females.

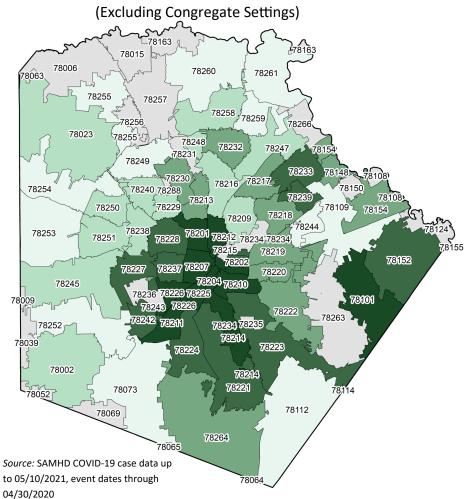
†Age-specific rates use ACS 5-yr 2019 gender-specific population estimates for Bexar County.

Deaths by Gender and Age Group, with Age-Specific Death Rates (N = 3,368*)

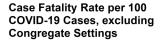


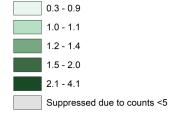
*Excludes 29 deceased cases (0.2%) for whom gender and/or age are unavailabl

COVID-19 Case Fatality Rate per 100 Cases



This map shows COVID-19 deaths per 100 COVID-19 cases (case fatality rate), excluding congregate settings (defined here as nursing homes, assisted living facilities, jails, homeless shelters, rehabilitation facilities, and military barracks). The geographic distributions continues to show the highest case fatality rates have occurred in zip codes closest to downtown San Antonio and in a some zip codes in eastern Bexar County. This spatial distribution has remained consistent over time.

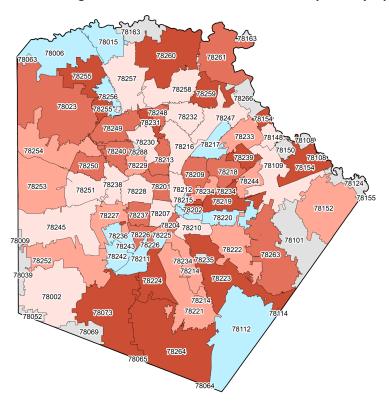




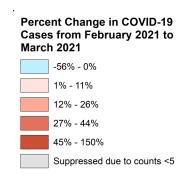


VII. Percent Change of COVID-19 Cases, January—March

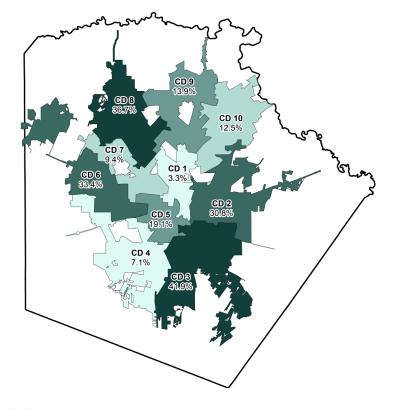
Percent Change in COVID-19 Cases from Mar'21 to Apr '21 by Zip



Approximately 80% of zip codes in Bexar County reported having a higher number of new COVID-19 cases in April 2021 compared to March 2021. **Zip codes in southern Bexar County tended to see the highest percent increase** in COVID-19 cases. Zip codes to the east and west of downtown tended to continue to see a percent decrease, or no change, in the number of new COVID-19 cases in April 2021 compared to March 2021.

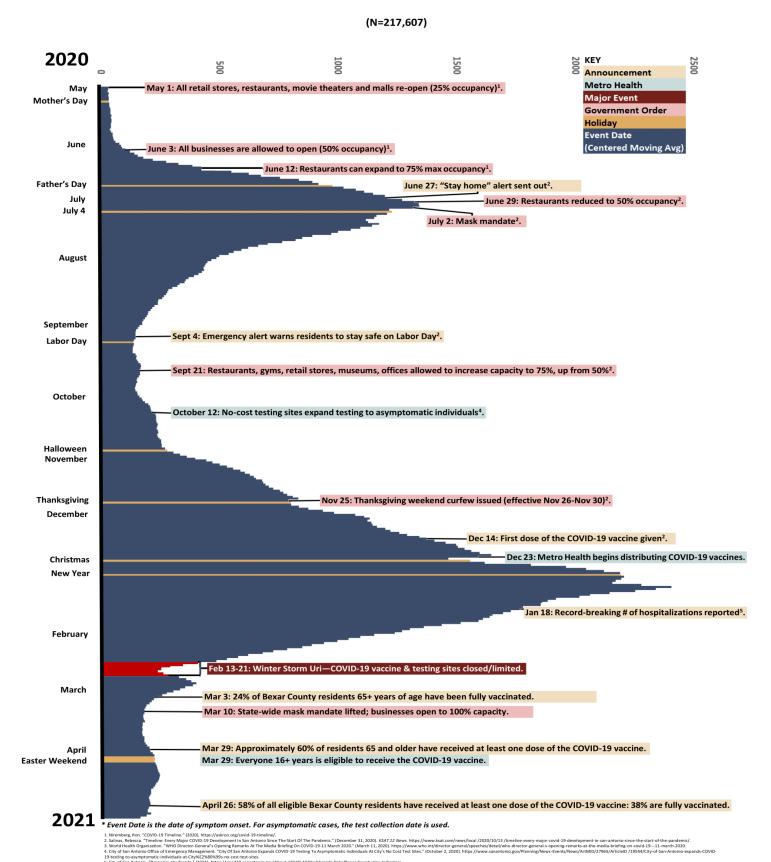


Percent Change in COVID-19 Cases from Mar '21 to Apr '21 by Council District



The map to the right depicts the percent change in COVID-19 cases from March 2021 to April 2021 by City of San Antonio Council District. Compared to March 2021, during April 2021, every council district saw an increase in new monthly COVID-19 cases. The Council District with the largest percent increase in new COVID-19 cases are Council Districts 3 and 8, with approximately 42% and 37% more new COVID-19 cases respectively during April 2021.

VIII. Bexar County COVID-19 Cases by Event Date: The Pandemic in Review



3. City of sent entonino. Detail County (Tettos. (2022), https://counts/sententino/gov/noonino-orial/exar-county-sep-initiations.